

# PEG-IFN Induced Interstitial Pneumonitis in Hepatitis C

ETAC Team



# IFN Associated Pulmonary Complications

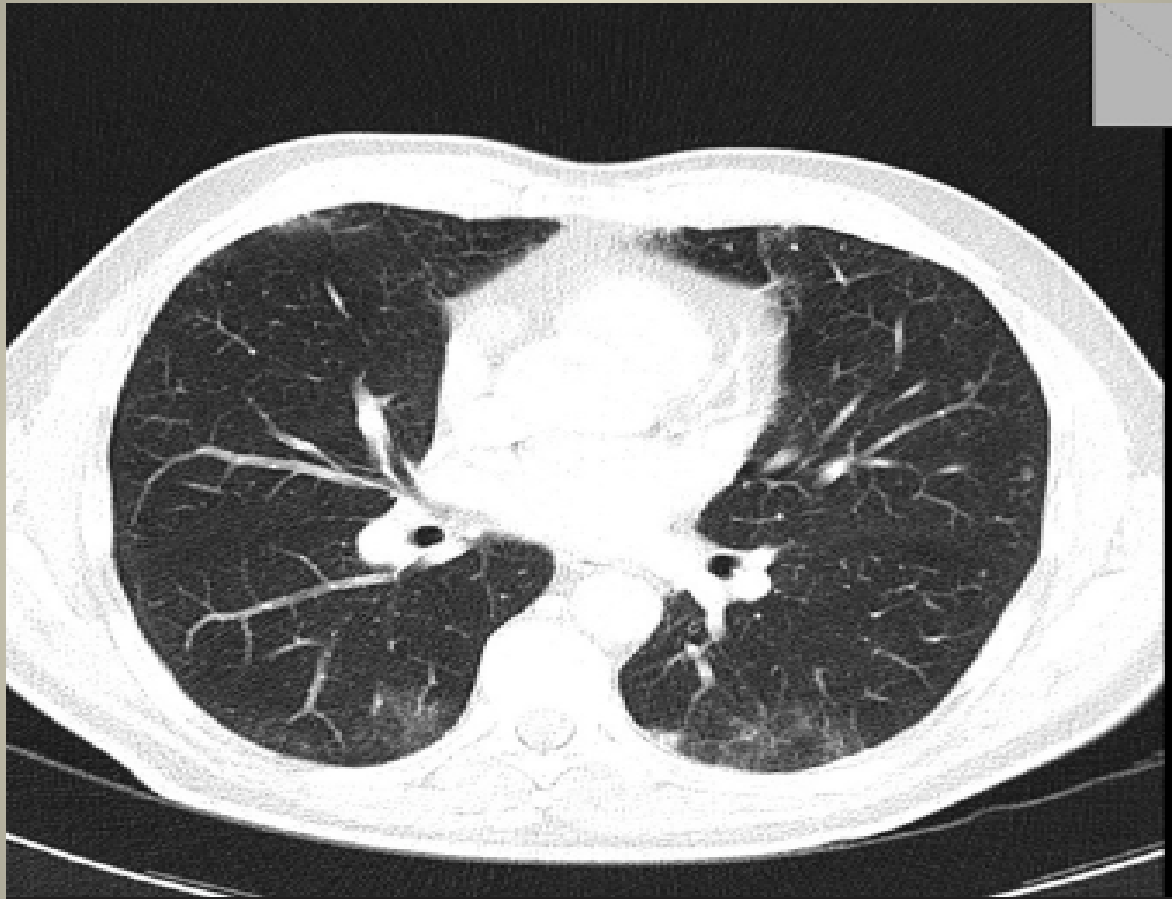
- Uncommon, incidence < 1%
- Pulmonary sarcoidosis
- Interstitial pneumonitis
- BOOP
- Pleural effusions
- Asthma exacerbation

# Pathogenesis

- Unclear
- More common in PEG-IFN, alpha-2b > alpha-2a
- Increase cytotoxic T cell and pro-inflammatory cytokines and release profibrinogenic cytokines
- Increase CD8+/CD4+

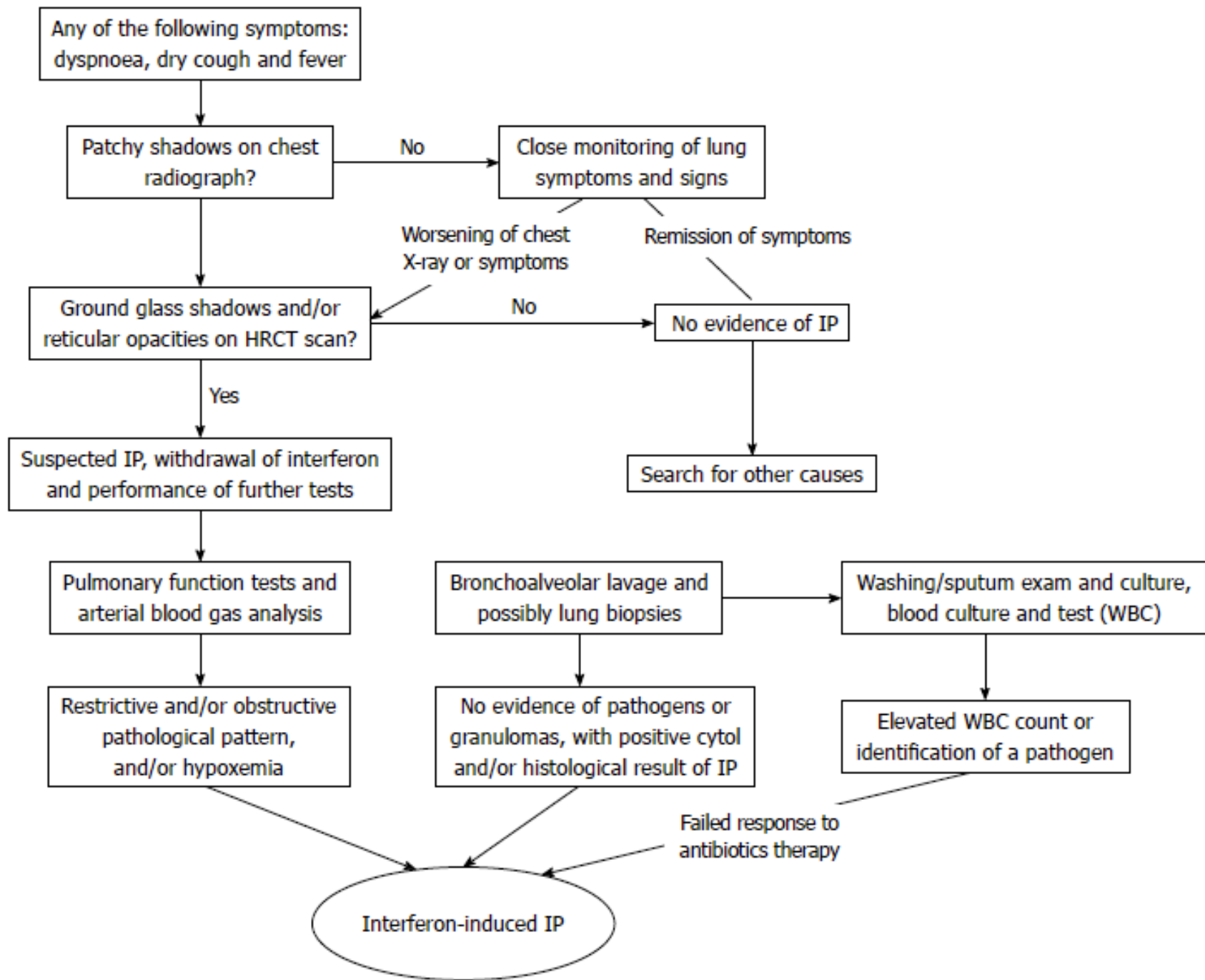
# Manifestations

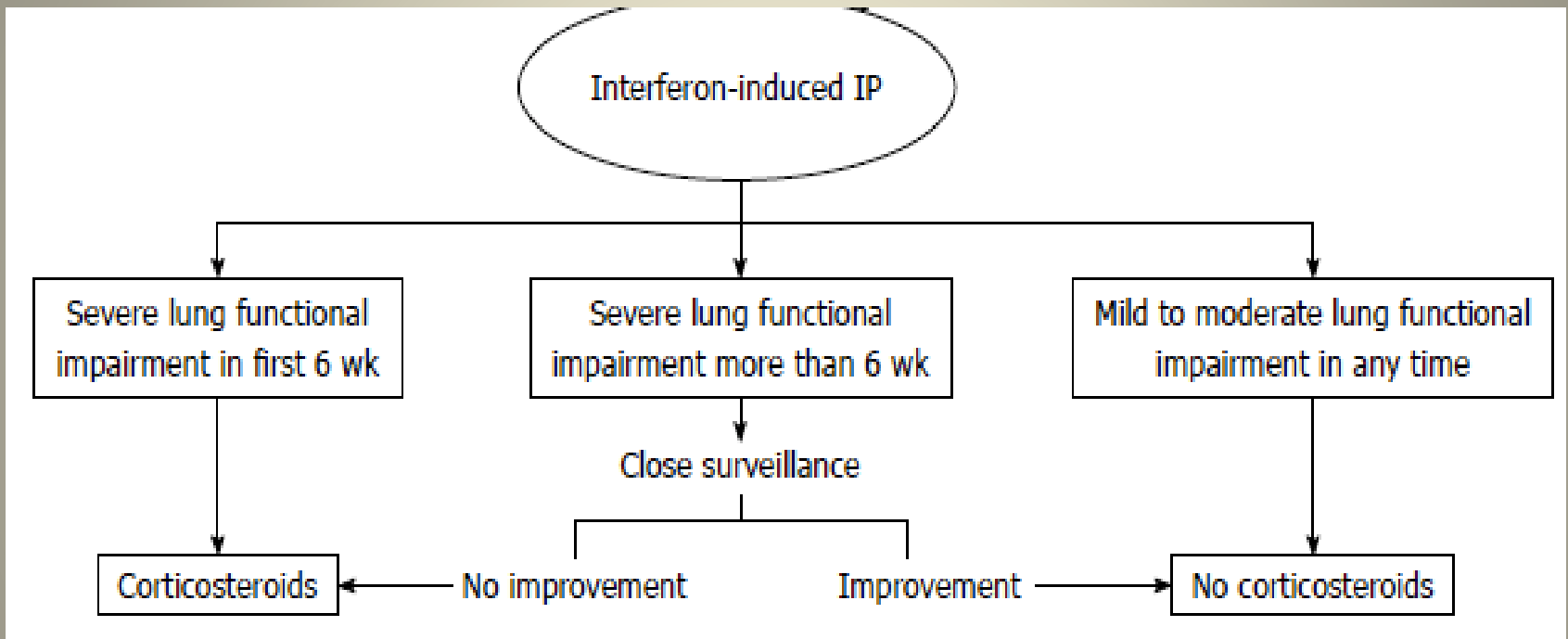
- Dyspnea, dry cough
- Fatigue, fevers, arthralgias and myalgias.
- Reticular, ground glass infiltrations
- Restrictive pulmonary function pattern w/wo hypoxia
- CHF and other infectious causes must be ruled out.
- Abnormal BAL, lung biopsy
- Improved after IFN discontinued, recur once rechallenged



# Treatment

- DC IFN
- Pulse steroids therapy in severe cases
  - Methylprednisolone 160 mg/kg x3days
  - Then prednisone 30 mg/day short term





Ji 2010



# Selected References

- 1: Torres-Macho J, et al. Pegylated interferon induced interstitial pneumonitis in a patient with hepatitis C infection. *Rev Esp Enferm Dig.* 2010 Oct;102(10):606-8.
- 2: Ji FP, et al. Diagnosis and management of interstitial pneumonitis associated with interferon therapy for chronic hepatitis C. *World J Gastroenterol.* 2010 Sep 21;16(35):4394-9.
- 3: Slavenburg S, Heijdra YF, Drenth JP. Pneumonitis as a consequence of (peg)interferon-ribavirin combination therapy for hepatitis C: a review of the literature. *Dig Dis Sci.* 2010 Mar;55(3):579-85. Epub 2009 Apr 28
- 4: Carrillo-Esper R, et al. Interstitial pneumonitis associated with pegylated interferon alpha-2b therapy for chronic hepatitis C: case report. *Ann Hepatol.* 2008 Jan-Mar;7(1):87-90. 74.